WHAT IS CLAIMED IS:

1. A chromatographic optical bio-disc, comprising:

a cap portion having inlet and vent ports formed therein;

a first channel layer having a first set of flow channels formed therein;

a chromatographic layer having pass through ports formed therein;

a second channel layer having a second set of flow channels formed therein; and

a substantially circular substrate having a center and an outer edge.

2. The optical bio-disc according to claim 1 further comprising a target zone disposed between the center and the outer edge of said substrate in fluid communication with said first set of flow channels, said second set of flow channels, and said pass through ports.

3. The optical bio-disc according to claim 2 further comprising capture agents located within said target zone.

4. The optical bio-disc according to claim 3 further comprising chromatography membranes.

5. The optical bio-disc according to claim 4 wherein said chromatography membranes are placed on said pass through ports such that when a sample is introduced through the inlet port, the sample moves into the first set of flow channels, through the chromatography membranes and the pass through ports, into the second set of flow channels and into the capture zone.

6. The optical bio-disc according to claim 5 wherein said chromatography membranes are ion exchange membranes.

7. The optical bio-disc according to claim 5 wherein said chromatography membranes are membrane adsorbers.

8. The optical bio-disc according to claim 5 wherein said chromatography membranes have binders associated therewith.

9. The optical bio-disc according to claim 8 wherein said binders are directed to glycated hemoglobin.

10. The optical bio-disc according to claim 8 wherein said binders are directed to non-glycated hemoglobin.

11. The optical bio-disc according to claim 1 wherein the substrate includes encoded information associated therewith, the encoded information being readable by a disc drive assembly to control rotation of the bio-disc.

12. The optical bio-disc according to claim 1 further comprising a reflective layer associated with said substrate.

13. The optical bio-disc according to claim 1 further comprising an enzyme, wherein the enzyme, when exposed to an enzyme substrate, produces a signal detectable by an incident beam of electromagnetic radiation.

14. An optical bio-disc, comprising:

a cap portion having inlet and vent ports formed therein;

a channel layer having a fluidic circuit formed therein;

a substantially circular substrate having a center and an outer edge; and

a micro-chromatographic matrix formed in said fluidic circuit.

15. The optical bio-disc of claim 14 further comprising an analysis chamber in fluid communication with said fluidic circuit.

16. The optical bio-disc of claim 15 further comprising a filter placed within said fluidic circuit.

17. The optical bio-disc of claim 16 further comprising a capture agent associated with the substrate in the analysis zone.

18. The optical disc of claim 17 wherein said micro-chromatographic matrix is formed from weak cation exchange beads.

19. The optical disc of claim 17 wherein said micro-chromatographic matrix is formed from anionic beads.

20. The optical bio-disc of claim 18 wherein said capture agent is haptoglobin.

21. The optical bio-disc of claim 20 wherein said analysis chamber is pre-loaded with a signal agent.

22. The optical bio-disc of claim 21 wherein said signal agent is an antibody.

23. The optical bio-disc of claim 22 wherein said antibody is labeled with a tag.

24. The optical bio-disc of claim 23 wherein said tag is detectable by an optical disc reader.

25. The optical bio-disc of claim 23 wherein said tag is selected from the group comprising an enzyme, a fluorescent particle, a fluorescent dye, a luminescent dye, and a luminescent particle.

26. A method of using the optical disc according to claim 24 for testing the amount of hemoglobin A1c in a hemoglobin test sample, said method of using comprising the steps of:

depositing the test sample into the disc through the inlet port;

rotating said disc at a predetermined speed and time to allow said test sample to move through said micro-chromatographic matrix allowing non-glycated hemoglobin present in the sample to bind to said micro-chromatographic matrix;

continuing said rotating step to move said test sample through said filter, and into said analysis chamber;

incubating the test sample to allow any glycated hemoglobin present in the sample to bind with said capture agent and allow said signal agent to bind with said glycated hemoglobin;

washing said analysis chamber to remove unbound signal agents; and

scanning said analysis chamber with a beam of electromagnetic radiation to determine the amount of signal agents bound to the glycated hemoglobin.

27. The method according to claim 26 further comprising the step of calculating the amount of glycated hemoglobin present in the sample based on the amount of bound signal agents.

28. A method of making a chromatographic optical bio-disc, said method comprising the steps of:

providing a substrate having a center and an outer edge;

encoding information on an information layer associated with the substrate, the encoded information being readable by a disc drive assembly to control rotation of the disc;

forming a target zone in association with the substrate, the target zone disposed at a predetermined location relative to the center of the substrate;

depositing a capture agent on the target zone;

forming a flow channel in fluid communication with the target zone; and

forming a micro-chromatographic matrix within the flow channel.

29. A method of making a chromatographic optical bio-disc, said method comprising the steps of:

providing a substrate having a center and an outer edge;

encoding information on an information layer associated with the substrate, the encoded information being readable by a disc drive assembly to control rotation of the disc;

forming a target zone in association with the substrate, the target zone disposed at a predetermined location relative to the center of the substrate;

depositing a capture agent on the target zone;

providing a cap portion having an inlet port and a vent port formed therein;

providing a first channel layer having a first set of flow channels formed therein;

providing a chromatographic layer having pass through ports formed therein;

providing a second channel layer having a second set of flow channels formed therein;

forming a chromatography membrane over said pass through ports; and

assembling the optical bio-disc such that said target zone is in fluid communication with said second set of flow channels, said pass through ports, said first set of flow channels, said inlet port, and said vent port.

30. An optical assay disc implemented to perform any of the methods recited in either claim 26.

31. Use of an optical analysis disc to perform any of the methods recited in either claim 26.

32. An optical disc assembly made to perform any of the methods recited in either claim 26.

33. An optical bio-disc system adapted to operate the optical assay disc recited in claim 30.

34. An optical bio-disc system adapted to read information stored on the optical assay disc recited in claim 30.

35. An optical bio-disc system adapted to write information relating to results of an assay onto the optical assay disc recited in claim 30.

36. An optical bio-disc system adapted to display on a monitor information relating to results of an assay conducted in association with the optical assay disc recited in claim 30.

37. An optical bio-disc system adapted to receive the optical assay disc recited in claim 30 and facilitate the performance of an assay associated with said optical assay disc.

38. An optical bio-disc system adapted to operate the optical analysis disc recited in claim 31.

39. An optical bio-disc system adapted to read information stored on the optical analysis disc recited in claim 31.

40. An optical bio-disc system adapted to write information relating to results of an assay onto the optical analysis disc recited in claim 31.

41. An optical bio-disc system adapted to display on a monitor information relating to results of an assay conducted in association with the optical analysis disc recited in claim 31.

42. An optical bio-disc system adapted to receive the optical analysis disc recited in claim 31 and facilitate the performance of an assay associated with said optical analysis disc.

43. An optical bio-disc system adapted to operate the optical disc assembly recited in claim 32.

44. An optical bio-disc system adapted to read information stored on the optical disc assembly recited in claim 32.

45. An optical bio-disc system adapted to write information relating to results of an assay onto the optical disc assembly recited in claim 32.

46. An optical bio-disc system adapted to display on a monitor information relating to results of an assay conducted in association with the optical disc assembly recited in claim 32.

47. An optical bio-disc system adapted to receive the optical disc assembly recited in claim 32 and facilitate the performance of an assay associated with said optical disc assembly.